OBJECT ORIENTED ANALYSIS AND DESIGN WITH UML

THREE DAYS

Description

Object orientation has become the predominant paradigm for virtually all modern software development. This course builds on basic concepts to apply object-oriented principles to all phases of the software development life cycle, with particular emphasis on analysis and design. Students will participate in case studies and short exercises. The Unified Modeling Language (UML) is introduced and is used as the common language.

Objectives

At the completion of this course, the student will be able to:

- Gathering requirements
- Documenting requirements with use cases
- Discovering objects
- Describing objects in UML
- Discovering object relationships
- Expanding object knowledge with CRC cards
- Describing object relationships in UML
- Identifying states
- Documenting states with state transition diagrams
- Documenting behavior with object interaction diagrams
- Evaluating an object model
- Applying design patterns

Topics

- What is UML
- Gathering requirements
- Discovering objects
- CRC cards
- UML class diagram
- Relationships between classes
- Inheritance
- Dynamic modelling
- Evaluation of object model
- Patterns

Audience

Software developers, programmers and analysts who are familiar with and experienced in software development methodologies who will be using object orientation and UML in upcoming projects.

Prerequisites

The students must have experience in software development and familiarity with object orientation concepts. It is recommended that the students take an Object Orientation Overview course or have equivalent experience.